

REMARKS

Claims 1-66 are pending in the application.

Claims 1-66 have been rejected.

Claims 1, 18, 46, and 54 have been amended.

Claim 67 has been added.

Rejection of Claims under 35 U.S.C. § 103(a)

Claims 1, 4, 6-13, 15-18, 21-23, 26-37, 39-46, 49-54, and 57-66 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over U.S. Publication No. 2003-0076781 by Enomoto ("Enomoto"), in view of U.S. Patent No. 6,026,075 issued to Linville ("Linville"), and in further view of U.S. Patent No. 6,910,079 issued to Zimmermann ("Zimmermann"). Applicants respectfully traverse this rejection.

The Office Action rejects independent claims 1, 18, 46, and 54 using substantially similar rationale. Without conceding that it is appropriate to treat the se separate patentable claims in this manner, but instead to simplify discussion for prosecution, Applicants submit that the below discussion applies to the rejection of all the independent claims. Applicants respectfully submit that the proposed combination of Enomoto, Linville, and Zimmermann fails to disclose each element of amended independent claim 1, which recites:

1. A method comprising:
 - receiving information at a first media access control (MAC) device from a client of the first MAC device, wherein
 - the information indicates a need to change an amount of data being transmitted through the first MAC device to the client of the first MAC device, and
 - the client generates the information in response to the client determining that the client is receiving data at a rate exceeding a set threshold;
 - forming a message including an indication to a second MAC device to change a rate at which the second MAC device transmits data to the client, wherein the first MAC device forms the message,
 - said forming the message uses the information indicating the need to change the amount of data being transmitted to the client,

said forming the message is performed in response to receiving said information, and
a total bandwidth allocation of the first MAC device is unaffected by said change; and
transmitting the message to the second MAC device over a network.

For example, Applicants respectfully submit that the proposed combination of Enomoto, Linville, and Zimmermann fails to disclose receiving information at a MAC device from a client of the MAC device, wherein the information indicates the need to change an amount of data being transmitted through the MAC device to the client. The Office Action states that Enomoto receives information indicating a need to change an amount of data transmitted through a first MAC device to a client of the first MAC device. Office Action, p. 3. Applicants respectfully disagree and submit that any information related to transmission rate change disclosed by the cited portions of Enomoto is in no way comparable to the claimed information as defined by the amended claims. The claimed information is received by a first MAC device from a client of the first MAC device and indicates a need to change an amount of data being transmitted through the first MAC device to the client of the first MAC device.

First, the cited portions of Enomoto fail to disclose information received from a client of a MAC device. The cited passages of Enomoto explicitly recite that “the second congestion control node A2 detects congestion” and “the second congestion control node A2 transmits a congestion control notification to the third congestion control node.” Enomoto ¶¶ [00237]-[00238]. Thus, the information cited by the Office Action as purportedly disclosing the claimed information is generated and sent by Enomoto’s “congestion control node” (which the Office Action attempts to equate with the claimed MAC device). Such information, sent by a congestion control node, cannot be properly equated to the claimed information, which is received from a client of a MAC device. Clearly Enomoto provides for a control node to send the congestion information to another control node. Thus, this is a peer-to-peer communication. The claimed communication is not peer-to-peer, but is instead from a client to a MAC device.

Second, the cited portions of Enomoto fail to disclose information that indicates a need to change an amount of data being transmitted to a client of the MAC device. Instead, the information indicates congestion in a transit buffer. *See, e.g.*, Enomoto ¶

[0237]. The cited portions of Enomoto fail to disclose a determination or any comparable operation that indicates that the amount of data being transmitted to a client of the congestion control node should be changed. In fact, there may be no data in the transit buffer directed to a client of the congestion control node. All data in the transit buffer may be directed to be output from the congestion control node. *See, e.g.*, Enomoto FIG. 3 (which shows that data entering a transit buffer can proceed directly to an output on a ring without proceeding to a client). Information indicating the need to change the amount of data sent to a transit buffer of a congestion control node is not the same as information indicating the need to change the amount of data sent to a client of a MAC device, as claimed.

Thus, the cited portions of Enomoto fail to disclose receiving information at a MAC device from a client of the MAC device, wherein the information indicates the need to change an amount of data being transmitted through the MAC device to the client, as claimed. Applicants respectfully submit that neither Linville nor Zimmerman, taken alone or in permissible combination with Enomoto, supplies this missing disclosure, nor does the Office Action suggest that the cited references do.

Applicants respectfully submit that the proposed combination of Enomoto, Linville, and Zimmermann also fails to disclose that a client generates information in response to the client determining that the client is receiving data at a rate exceeding a set threshold. The Office Action admits that Enomoto fails to disclose such features. Office Action, p. 3. The Office Action also fails to cite any portions of Linville as purportedly supplying this missing disclosure. Instead, the Office Action cites portions of Zimmerman as purportedly teaching that a client monitors the client's own buffer threshold and data rate and notifies the network nodes upstream of a need to change the sending rates. Office Action, p. 4 (citing Zimmermann 4:6-36). The cited portions of Zimmermann purport to disclose a client detecting multiple threshold fill levels of a buffer and sending a server a transmission rate based on a predicted level of the buffer.

Applicants note that the above-mentioned portions of Zimmerman fail to disclose that the client is a client of a first MAC device. Instead, the cited portions of Zimmermann relate to calculation of a rate change information supplied directly to a

server by a client. No MAC device-based flow control is disclosed or contemplated. The cited portions of Zimmermann fail to disclose anything remotely comparable to the claimed first MAC device. It therefore follows that the cited portions of Zimmermann must also fail to disclose a client of the first MAC device generating information regarding a rate at which data is transmitted to the client of the first MAC device.

Applicants respectfully submit that the proposed combination of Enomoto, Linville, and Zimmermann also fails to disclose a first MAC device forming a message including an indication that a second MAC device should change the rate at which the second MAC is sending data to a client of a first MAC device, as claimed. Applicants respectfully submit that the proposed combination of Enomoto, Linville, and Zimmermann also fail to disclose forming such a message in response to receiving information from the client indicating that the client is receiving information at too great a rate and sending the message to the second MAC device, also as claimed. The Office Action states that Enomoto discloses forming a message including an indication to a second MAC device to change a rate at which the second MAC device transmits data, wherein said forming the message uses information indicating the need to change the amount of data being transmitted to the client. Office Action, p. 3. However, as discussed above, the cited portions of Enomoto do not disclose a MAC device receiving information indicating the need to change the amount of data being transmitted to a client of the MAC device. Instead, the cited portions of Enomoto merely relate to congestion in a transit buffer. Since the cited portions of Enomoto fail to disclose receiving such information, it necessarily follows that the cited portions of Enomoto must, and in fact do, also fail to disclose using such information to form a message. Applicants respectfully submit that the Office Action fails to cite portions of either Linville or Zimmermann that cure this deficiency when considered alone or in permissible combination with the cited portions of Enomoto.

For at least the foregoing reasons, Applicants submit that the proposed combination of Enomoto, Linville, and Zimmermann fails to disclose all the limitations of independent claims 1, 18, 46, and 54, as amended, and all claims depending therefrom, and that these claims are in condition for allowance. Applicants therefore respectfully

request the Examiner's reconsideration and withdrawal of the rejections to these claims and an indication of the allowability of same.

Claims 2-3, 5, 14, 19-20, 24-25, 38, 47-48, and 55-56 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over U.S. Publication No. 2003-0076781 by Enomoto, in view of U.S. Patent No. 6,026,075 issued to Linville, and U.S. Patent No. 6,910,079 issued to Zimmermann, and in further view of U.S. Publication No. 2003/0163593 by Knightly ("Knightly"). Applicants respectfully traverse this rejection. Applicants respectfully submit that these claims are allowable for at least the foregoing reasons. Accordingly, Applicants respectfully request the Examiner's reconsideration and withdrawal of the rejections to these claims and an indication of the allowability of same.

Claim 67 has been added. Support for claim 67 is found, at least, at ¶ [0044] of Applicants' Specification. No new matter is added. Applicants respectfully submit that the cited portions of Enomoto, Linville, and Zimmermann fail to disclose a comparable operation, whereby a message formed by one MAC device identifies a second MAC device as having originated the message. Such an operation can be used in allowing the first MAC device to retain the same bandwidth allocation despite a reduction in the amount of data transferred to a client of the first MAC device.

CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5092.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicants hereby petition for such extensions. Applicants also hereby authorize that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,



Shawn Doman
Attorney for Applicants
Reg. No. 60,362
Telephone: (512) 439-5092
Facsimile: (512) 439-5099